

# United States Patent [19]

Vromen et al.

[11] Patent Number: 4,911,181

[45] Date of Patent: Mar. 27, 1990

## [54] PLASTIC MOUTHPIECE FOR SIMULATED SMOKING

[75] Inventors: Zwi Vromen, Tel Aviv; Joseph Gross, Moshav Mazor, both of Israel

[73] Assignee: Inventor's Funding Company, Ltd., Tel Aviv, Israel

[21] Appl. No.: 222,534

[22] Filed: Jul. 21, 1988

### [30] Foreign Application Priority Data

Sep. 8, 1987 [IL] Israel ..... 83826

[51] Int. Cl.<sup>4</sup> ..... A24F 47/00

[52] U.S. Cl. .... 131/273; 131/270

[58] Field of Search ..... 128/200.23, 202.21, 128/760, 765; 131/270, 271, 272, 273; 604/133, 135, 142, 146

### [56] References Cited

#### U.S. PATENT DOCUMENTS

2,860,638	11/1958	Bartolomeo .	
3,320,953	5/1967	Rindner .	
3,340,869	9/1967	Bane .....	128/765
3,347,231	10/1967	Chang .	
3,365,102	1/1968	Castleberry .	
3,587,573	6/1971	Flack .	
3,710,804	1/1973	Wey .	
4,083,372	4/1978	Boden .	
4,171,000	10/1979	Uhle .	
4,284,089	8/1981	Ray .	
4,296,071	10/1981	Weiss et al. ....	128/765
4,393,884	7/1983	Jacobs .....	131/273
4,429,703	2/1984	Haber .....	131/273
4,539,985	9/1985	Magrath .....	604/133 X
4,569,136	2/1986	Loring .....	131/273
4,655,294	4/1987	Sensabaugh .....	131/273

## FOREIGN PATENT DOCUMENTS

1398033	3/1965	France .....	131/270
2601563	1/1988	France .	
148789	5/1965	Netherlands .	
2089188	6/1982	United Kingdom .	

Primary Examiner—V. Millin

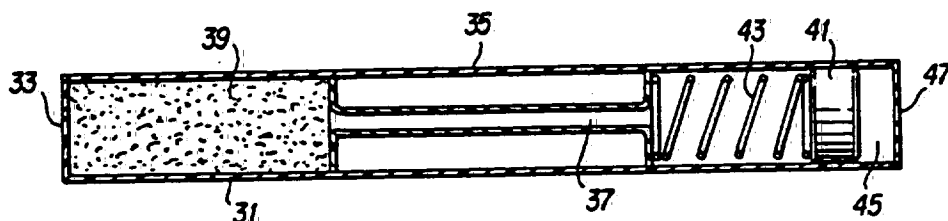
Assistant Examiner—D. F. Crosby

Attorney, Agent, or Firm—Oblon, Spivak, McClelland, Maier & Neustadt

## [57] ABSTRACT

The invention includes a cigarette like device which enables the user to experience the taste and aroma as well as the tactile sensations of smoking a tobacco cigarette—but without the presence of smoke, without any combustion, and without inhalation of harmful carcinogenic substances (e.g. tars) into the user's lungs. The device consists of a plastic mouthpiece containing a plug of chewing tobacco connected to a plastic tube with an axial duct, extending to a sealed end, where there is located a pumping member in the form of a flexible accordion-like, or bellows-type configuration or a spring-loaded ball or position. In a further embodiment, the device consists of a conventional mouthtip filter, or a tubular body with a flexible collapsible side wall sealed at the far end, and a tobacco insert. In the device, repeated suction cycles by the user are utilized to initially draw the user's saliva through the tobacco insert to flavor it with nicotine, and then to recirculate this saliva back to the user's mouth on successive suction cycles, allowing the user to taste and smell the nicotine. Inserts other than tobacco can be used in the device (e.g. menthol, various medications and the like).

11 Claims, 2 Drawing Sheets



RECEIVED  
PHILIP MORRIS MANAGEMENT CORP.  
LAW DEPT.—PATENT SECTION

APR 17 1990

NOTED *[Signature]*  
*[Signature]*

2021343276